

# South Delta Fish Facilities Forum

DRAFT Meeting Summary and Action Items

July 18, 2003, 2:00 – 5:00

California Bay-Delta Authority, Bay-Delta Room  
Sacramento, California 95814

## Attendees

Diana Jacobs ..... DFG (Forum Co-Chair)  
*Kirk Rodgers (Not Present)* ..... USBR (Forum Co-Chair)  
*Tim Quinn (Not Present)* ..... MWDSC (Forum Co-Chair)

Tina Swanson ..... Bay Institute  
Ron Ott, Darryl Hayes ..... CBDA  
Steve Macauley ..... CUWA  
Perry Herrgesell, Bob Fugimura, Steve Foss, Pat Coulston ..... DFG  
Rick Soehren, Roger Churchwell, Don Kurosaka, Terry Mills ..... DWR  
Bruce Herbold (Phone) ..... EPA  
Doug Lovell (Phone) ..... FFF (Federation  
of Fly Fishers)

Rick Sitts, Jim Buell, Randall Newdeck ..... MWDSC  
Dan Odenweller, Diane Windham, Bruce Oppenheim ..... NMFS  
B.J. Miller ..... SLDMWA  
Ron Silva, Charles Liston, Ken Lentz ..... USBR  
Dave Harlow ..... USFWS

## Agenda

Introductions ..... All  
Announcements ..... All  
SDFF Forum Charge ..... Diana Jacobs  
SWP/CVP Salvage Statistics ..... DFG  
Tracy Demonstration Flume Concept ..... USBR  
DIDSON Underwater Camera at Release Sites ..... DWR  
Integrated Fish Modeling Framework ..... MWDSC  
Next Meeting ..... Dianna Jacobs

Note: Handouts and presentation materials from this meeting and previous ones are located on the CBDA website under the Conveyance Program:

<http://calwater.ca.gov/Programs/Conveyance/SDFF/SouthDeltaFishFacilitiesForum.shtml>

## Announcements

Kirk Rogers and Tim Quinn were unable to make this meeting.

The California Bay-Delta Authority is meeting August 14, 2003

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## **South Delta “Zone of Influence” study proposal**

Ken Lentz announced that the IEP Estuaries Ecology Team (EET) is developing a Fisheries/Hydraulic study proposal in the South Delta Zone of Influence. This proposed effort will look at how pumping operations (gulp, tides, pumping rates, etc.) may impact fish movements both when the barriers are in and out. This proposed three year effort may include pilot level 3-D hydraulic modeling, fish sampling methods, and hydroacoustics initially, followed by field data on channel flows and intensive fish collections in subsequent years (2005 and 2006). The proposed effort will address coordination with the fish facility groups and operators – it is intended to be a complementary study and assist in addressing questions with the near and “far” field Zone of Influence.

The USBR/USGS/DWR/DFG are currently developing the concept through the EET. IEP is represented by Pat Coulston and Ted Sommer in the development.

Funding for this will likely be outside the IEP. DWR and the USBR are exploring if they can fund this effort. CUWA may be asked to participate if this evolves.

It was suggested that the CCWD operations and EWA actions be added to this effort. More Strategic thinking is needed to develop this proposal.

### **Action Item:**

***The USBR will organize a presentation at the next SFFF Forum meeting to flesh out this concept since it relates to the Forum’s charge. A concept proposal will be handed out at that meeting for discussion outlining objectives, staffing, and funding requirements.***

### **SFFF Forum Charge**

Diana Jacobs discussed the Forum’s charge for the benefit of the group. The group’s purpose has been discussed in prior meetings; however, a decision timeline and the relationships between the various CALFED Bay-Delta Program actions need more discussion.

A draft “Forum Charge” was distributed. This “Charge” also included a brief discussion of the South Delta conveyance program elements that require some dependence on fish facility implementation or research. A narrative timeline for decisions and their relationships was also included. These actions are identified in the CALFED Record of Decision or the accompanying Biological Opinions. The draft document is available on the CBDA website as referenced above.

Key discussion points were as follows:

- A recommendations section is needed, but it was decided that these would be developed after there was more agreement on the Charge;
- The Forum is a place for vetting of ideas and understanding of South Delta facility issues;
- The Forum may need a more formal linkage to the CBDA. The Forum does not currently report to a specific Committee; however, it has made presentations to the

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BDPAC Water Supply Sub-committee to date. The SDFF Forum is under the Conveyance Program. It also relates to CVPIA South Delta fish facility actions for Tracy pumping plant. Diana Jacobs stated that the Forum leadership is what it is all about and that that is more important than process;

- This group should be able to help in getting funding for programs they support. Because of a lack of funding for fish facility related actions through CALFED (i.e. Tracy Fish Test Facility, etc.), the Forum can help in prioritizing elements for research;
- It was thought that some EWA linkage and goals would be good to add to the Charge;
- A project relationship chart and specific timeline is needed;

**Action Items:**

***A project relationship and specific timeline will be developed by Ron Ott for review.***

***Comments on the Draft Charge and Background section should be directed to Ron Ott. This will also be an agenda item on next months meeting.***

**SWP/CVP Salvage Statistics**

Pat Coulston and Steve Foss presented salvage data trends at the SWP and CVP fish facilities over the past 10 years. Looking at salvage trends over a longer period was not felt to be very relevant to the discussion on what is occurring today and the data is very messy when combined. Expected fish salvage data trends in 2020 are expected to be very different as well. Please see the PowerPoint presentation on the website and the accompanying notes that explain the trends and data.

While the website notes explain the slides best, a few key points were made:

- Data is presented as **expanded salvage** only! Fish losses due to the lower efficiencies and forebay predation are not factored into these numbers. Fish counts during a typical 10-minute period are expanded between counting periods. Counts are typically taken every two hours or when pumping rates change;
- Salvage efficiency and the corresponding fish losses between the SWP and CVP can be significant, especially for smaller fish (<25mm);
- Fish less than 20 mm are not recorded; therefore, their absence in the counts does not mean that they are not being salvaged or lost. For instance, many delta smelt that show up in March and April are not counted due to their size;
- Positive barrier screens will salvage a significantly higher number of smaller fish than are salvaged now;
- Native fish species typically come in earlier in the year than non-natives;
- Fish salvage typically correlates to the Midwater trawl data but longfin smelt, for instance, do not;

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- The current species assemblage should not represent the pattern that we hope to maintain – we should be striving for more native species and focusing on their protection;
  - Facilities operation over the past 10 years has been more focused on ESA protections;

**Action Items:**

**None**

**USBR Tracy Demonstration Flume Concept**

Ron Silva presented a concept proposal for a reduced size Tracy Fish Test Facility. Funding for a larger TFTF is not available, yet site specific technology development is still needed. Therefore, the USBR is exploring options that can achieve many of proposed TFTF functions at a reduced cost. The USBR is exploring new technologies not only for the benefit of CALFED, but also for their facility improvement mandates through the CVPIA. The existing Tracy fish facility is nearing the end of its useful service life.

The purpose for this presentation was to determine if the USBR should continue to develop this concept, and if so, to get direction on the scope of the project since compromises are likely. State and limited federal (CVPIA) funding may be available for this effort.

Two concept flume figures are available on the SDF Forum website for review. The following is a general description of the proposed flume, its intended features, and some discussion points:

- This concept will be flushed with the appropriate technical teams as it is developed. The desire is to accommodate as many of the original testing objectives as possible at a “reasonable scale”;
- The flume would be installed behind the existing louvers. Any fish entrained into the flume would already be considered lost at the CVP;
- The flume would be installed at the proposed TFTF site; however, the main flume would be above ground, receiving water via “fish friendly” pumps in the Delta Mendota Canal. Water would flow through the facility once and be returned into same canal;
- The proposed flume would not be part of any proposed expansion facility at the larger TFTF could have been;
- The current concept may cost between \$6-10 million. Operations and testing could cost \$2-3 million annually (three years testing may be proposed);
- The facility could be operational in early 2006 if permits and approvals are made soon;
- A document describing how this proposal would fit with the CHTR and other pieces is necessary before any decision, including a timeline for actions and decisions;

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**Action Items:**

***The USBR will prepare a summary of the concept proposal describing the features, objectives, and rough costs. This summary will include a timeline and its relationship to other actions and technology development needs.***

***The Sdff Forum will consider this summary at the next meeting and give direction to the technical groups for further development as warranted.***

**DIDSON Underwater Release Site Video Investigation**

Roger Churchwell discussed a high tech underwater acoustic “camera” that DWR just acquired. During some initial testing of the unit, DWR and NOAA Fisheries staff took the unit to the SWP fish salvage release site near Horseshoe Bend on the Sacramento River. The DIDSON camera was set up on a boat and documented fish behaviors and positions near the release pipe before and during a typical fish release. The video showed a number of very large fish lined up and preying on the smaller released fish. While this investigation only documented a snapshot of what may be occurring at the release sites, it will form the basis for future studies as part of the CHTR effort. The website includes the PowerPoint of the technology and release site configuration. A video clip may be available on the site soon.

A few discussion items were made:

- The video describes what many biologists have been speculating for years. This technology will be useful in a further evaluation;
- A detailed proposal on release site investigations will be included as part of DWR’s proposed CHTR investigations. Further investigation will be limited since CHTR budgets and study plans have not been approved by CALFED Science and the IEP;
- Some questioned why we were going to so much trouble if a lot of the fish are getting preyed upon at the end of the process. Would we be better to simply exclude fish with fish screens (i.e. no salvage) and keep them in the South Delta?;
- While this video is very revealing, we should not jump to conclusions prior to an investigation;
- The USBR’s proposed Rio Vista release site design should consider this information in the design of the release facility;

**Action Items:**

***A detailed release site study proposal will be developed and included as part of the DWR CHTR efforts.***

**Integrated Framework for Comparing Actions Affecting Fish**

Rick Sitts made an abbreviated presentation on CUWA’s proposed “FRAMEWORK FOR COMPARING ACTIONS AFFECTING FISH.” The effort is intended to integrate fish management as a guiding concept for prioritizing science and policy decisions in the Delta.

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The full presentation is included on the website. The framework will compare fish benefits with a number of action costs. The effort began in June 2003. Recommendations on pilot actions are expected in May 2004. The timing of the recommendations are tied to the EWA decisions. CUWA is funding this collaborative effort with technical assistance by R2 and Cramer and Assoc. All work will be coordinated with the various fisheries agencies.

The proposed effort relates the SDF Forum questions since there are several proposed fish screen actions included in the mix.

- There is a need to engage the fisheries agencies to evaluate the fisheries benefits;
- There was some concern that recommendations could be too species specific if modeling is only for that species (i.e. say salmon);

**Action Items:**

- *None*

**Suggested Agenda Items for Future Meetings (running list):**

UC Davis Fish Treadmill results on delta smelt and salmon and their application to new facilities;

USBR/DWR/USGS South Delta concept proposal on the "Zone of Influence" – including a discussion on how to evaluate and address SDIP actions (fisheries changes due to hydraulic and operational influences);

USBR Tracy demonstration Flume Concept;

Tracy fish facility studies and technology development;

Predation in South Delta Channels (salmon) – What we know/don't know;

Mortality in the Delta – Discussion of USFWS release studies showing central Delta losses and possible discussion on conceptual models being investigated;

Population Significance – Discuss limitation of studies and their meaning as was recently presented at a workshop;

Alternatives to fish salvage facilities;

Biological Opinions (OCAP/SDIP)– Information on facilities that will be used in developing these;

Incidental Take -- What is reasonable?

CVFFRT and IEP MT Tools – results of discussion by these teams on ideas and on-going/past investigations that could help address SDF issues.

**Next Meeting**

Date was not determined. It will likely be in late August or September 2003

Location: California Bay-Delta Authority Office  
650 Capitol Mall, 5<sup>th</sup> Floor  
Bay-Delta Room